ECON 202

Lesson 3: Market Distortions
Reading: Chapter 4

In this section we will:
- Show how supply & demand can be used to analyze the labor market.
- Discuss how government interventions as price controls and taxes create distortions

Supply and demand analysis can be used to examine the labor market:
- Workers supply labor hours and firms demand them for a price called wage
- Labor supply is *backwards bending* because at low wages the *substitution effect* (the opportunity cost of leisure increases as income rises) dominates and at high wages the *income effect* (the value of leisure increase as income rises) dominates

*Is it fair to say that time is more valuable for wealthy individuals? Explain.*

![Labor Market Diagram](image)

Shifts in the supply and demand for labor:
- Demand for labor (and for other resources used in the production of a good) will increase if the demand for the good that they produce increases (it’s a *derived demand*)
- Supply of labor will increase if the population increases or if a larger portion of the population decides to go into a specific profession

*What will happen to the wage of car workers if the demand for cars increases? What will happen in the long run?*

There is little need for government intervention in most markets since they will generally be efficient (exceptions include public goods, market with externalities and monopolies).

- Efficiency is achieved when *total surplus* (consumer surplus plus producer surplus) is maximized. *Can you show that total surplus is maximized at equilibrium price?*

The government can impose various *price controls*:
- **Price Floor:** The lowest price that can be legally charged.
- **Price Ceiling:** The highest price that can be legally charged.

- If a price floor is below or a price ceiling is above the market equilibrium price they will have no effect on the market. *Why?*
Effects of a Price Ceiling:
- There is a *shortage* in the market
- Producer surplus falls
- Consumer surplus may increase or decrease
- The ceiling creates a *deadweight loss*
- Ceiling may lead to the creation of black markets (unregulated markets)
Example: rent controls in New York City.

*Why do governments impose price ceilings?*

Effects of a Price Floor: *(Complete these)*
- There is a *surplus* in the market.
- Consumer surplus ...
- Producer surplus ...
- The floor ... deadweight loss.
Examples: Minimum wage. *Other examples?*

*Why do governments impose price floors?*

Governments must levy taxes in order to collect the revenue necessary to provide public goods, to support various transfer payments programs and to pay its debt.

Effects of a Tax:
- Government will collect *tax revenue*.
- Consumer surplus ...
- Producer surplus ...
- The tax ... a deadweight loss.
Tax burden will be shared between the consumers and the producers.

The portion of the tax that is bore by producers and consumers depends on the elasticities of the demand and supply curves.

The more inelastic (vertical) the demand curve is, the higher the burden that consumers bear. *What will happen if the supply is inelastic? Show this on a graph.*